

THE macdonald JOURNAL

SEPTEMBER 1976

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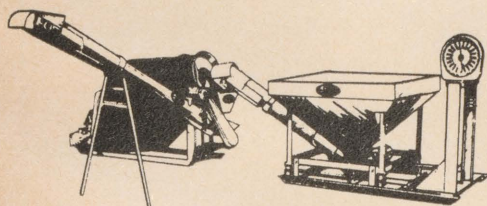
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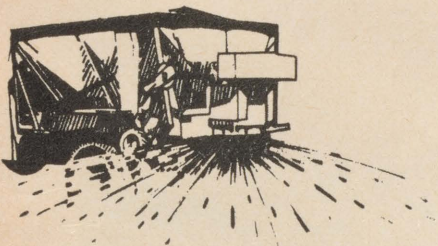
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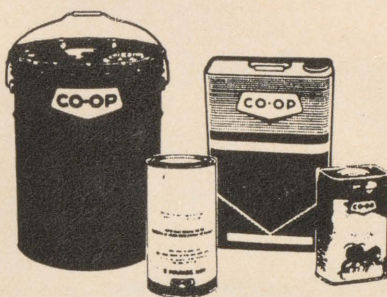
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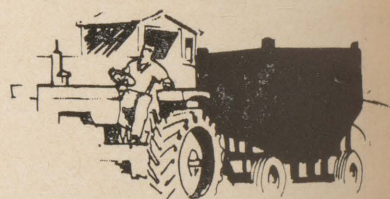
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SEPTEMBER 1976

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Journal Jottings

Although I am writing this column in the relative calm of the week before the start of a holiday break for me, I know that a different atmosphere will prevail when the September Journal is published. September will be an exciting and busy month at the College. Degree and Diploma students will be returning to classes and other activities, one of which is the Fall Royal. There is usually a breathing space between the start of term and the all out effort that is put into this fall event. This year, in order to hold the Royal in conjunction with the National and Provincial Plowing Matches, some students and staff have been working all summer planning and organizing and, with the arrival of the full contingent of students,

there will be a last-minute rush of assembling displays, painting posters, and putting the finishing touches to what always has been a very informative exhibit depicting the various disciplines and interests found on this Campus. The students' deadline is September 23 as it is for the group organizing the Plowing Matches. Martin van Lierop tells us about them in this issue.

Visitors to the Farm and Campus will also be invited to see some of the research projects being carried out at the College. Whether you plan to take in these events or not, may I suggest you read

Professor Grant's article on research funding for research is as vital to the life of a college and the community it serves as is teaching and extension.

Hazel M. Clarke

Professor Grant's article in this issue brings to light a problem that everyone in farming and the agricultural industry should be concerned over. Many of us fear that the recent cutback in agricultural research funding is going to have a pronounced, long-term, adverse effect upon agriculture. Funding of agricultural research has been on the increase for the past 20 to 30 years and has played a dramatic role in North American agriculture. In fact, many single out research as the key factor for the tremendous increase in farming productivity and efficiency that has taken place during this century.

One of the main factors affecting government funding and, in fact, private funding has been inflation. Funding just hasn't increased as fast as the cost of doing research. As a result, institutions have from 15 to 20 per cent less buying power than they had 10 years ago. What alarms many people is that this is happening just at the time that the demand for food has begun to grow faster than our ability to produce it.

During the last 10 years we have seen a growing public concern over such things as the environment, consumer protection, and

problems of urbanization. These are certainly all legitimate and serious issues, but we also have to realize that public concern over them has tended to shift research attention from agricultural production to consumer and environmental problems. One result from this has been that we now see much more "defensive research" designed to enable industry to meet government regulations and less on finding new ways to increase food production.

This trend has probably resulted because of the decline in the number of farmers and their political strength over the past 50 years. Consumer, urban, and environmental groups have become more vocal and have got the attention of government spending agencies and legislators. It seems that if agriculture is to gain a larger share of the research dollar, it is also going to have to become more vocal and visible to legislators.

It is a big job to be done, but at the same time it is a very necessary one. The chances of improving would be increased if everyone in the agricultural industry, including farmers, would

help sell the value of agricultural research to nonfarm groups. It is important that farmers impress upon consumers that an adequate food supply depends directly upon agricultural research. Because of their limited numbers, farm groups might well concentrate upon convincing urban groups who could in turn influence the budget people in government. Perhaps farm groups could circulate petitions or letters of endorsement to various nonfarm groups in their community which could in turn be sent to appropriate officials.

This decline in the relative position of agriculture has serious implications both for the researcher and the farmer. For if research funding can be cut because of the influence of nonfarm groups, so can funding for farmer loans, grants, and subsidies. That's something for all of us to think about.

Gordon Bachman

Funds for Agricultural Research Dwindle

by W. F. Grant,
Professor of Genetics,
Genetics Laboratory

There is no time in our history when Canada needs, more acutely, science based solutions to our national and regional problems. Yet the policies of our present federal government with respect to research are affecting the future development of all aspects of science including agriculture.

Many of the scientists in Agriculture are supported in their research from funds provided by the National Research Council of Canada. Since 1969 increases in funds have not kept pace with the cost of living. For example, the Science Council of Canada has reported that a 1974 biology operating grant would buy 41 per cent less research than a 1969 grant. Recently, the Royal Society of Canada stated that the share of the Gross National Product going to research in Universities in 1975 was only 68 per cent of the 1969 level. Research funds for 1976-77 have been frozen at the 1975-76 level without any compensation for inflation.

Let us look at a few of the achievements in agricultural genetics, the area of research with which I am most familiar:

(1) Agricultural Geneticists have developed disease resistant cereal grains. The outbreak of stem rust of wheat in 1954 and southern corn leaf blight in 1974 each could have caused another Irish potato famine had not our scientists had alternatives.

(2) Rapeseed has been adapted as a high protein food suitable for human and animal consumption.

(3) Wheat resistant to the wheat stem sawfly has been developed making possible increased yields.

(4) The leaf cutter bee, which pollinates alfalfa, has been domesticated and is now sold throughout the world.

(5) Crops specifically suitable for northern climates have been developed; for example, corn and high protein wheat. Development of crops suitable for Canada is unlikely to take place in any other country.

(6) Triticale — a new cross between wheat and rye — has shown considerable success.

(7) The Lacombe hog, with superior meat qualities, has been developed.

At Macdonald College many research projects have contributed directly to the economy. A few of the crops which have been developed include Dorval, Roxton and Shefford oats, Algonquin corn, Milton and Drummond timothies, Laurier, Loyola and Montcalm barley, Dollard red clover, Leo birdsfoot trefoil, Macdonald Pink tomato, Macdonald rhubarb and Laurentian rutabaga.

These success stories which benefit everyone have resulted from basic and practical research which is being curtailed. Many projects have had to be dis-

continued. At the same time, highly trained technical staff are gradually being dismissed. A freeze on funds for the 1976-77 year has been described as belt-tightening. However, it is now clear that such restraints will seriously jeopardize the viability of research which may have a long term deleterious effect.

Canada stands very low on the scale in terms of per capita spending on science — below not only the United States, France, Britain, but even the Scandinavian countries and Japan. It seems clear from government non-action that research funding represents an easy political target, or that the public would not make this area one of its high priorities.

The Honourable Minister of State for Science and Technology has stated we can import research from other countries, but we cannot do so if there is not a community of high-quality scientists to evaluate such research. Even imported research would have to be modified to adapt to Canadian climatic conditions.

Here are a few reasons why research in universities must have greater financial support:

(1) Research can **save** money: Consider the money saved through disease prevention, increased production of improved varieties of crops and animals for food. A few dollars saved today is a surprising short-sighted view for the leaders in a developed country.

We are shirking our responsibility as a developed nation if we cannot contribute our share to the acquisition and application of scientific knowledge.

(2) Research and teaching are inseparable. Researchers in a particular field are involved in up-to-date studies which promote high quality teaching.

(3) Perhaps the most serious consequence of the present inadequate funding is that our best students are not being attracted to research. Many will train in some other area of study or go elsewhere for their training. This is truly unfortunate for the future of Canada.

(4) Many of the best scientists go where they can be funded at levels appropriate to their ability and capacity. This means they now are leaving Canada. Loss of these top people will result in a deterioration of teaching and research quality in Canadian universities. We may eventually find ourselves with a shortage of top scientists in our country. If we are to have a scientific community at all, we will then have to import trained scientists. In view of the current concerns about Canadian staff in Canadian universities, this would be an unfortunate situation and a further reflection of our branch plant mentality.

One simple consequence of the research funding practice of the present government can be under-

stood by everyone. Under present conditions, when the population of Canada increases by 30 per cent, it has been calculated that Canada will become a net importer rather than an exporter of cereal grains. A thousand scientists could reverse this trend — a thousand lawyers could not.

It will not be possible to ever completely compensate for the loss through government belt-tightening in the past five years. Many briefs have been presented to the government to no avail. Agriculturalists consider the government very short-sighted in that the eventual cost to build up the crumbling scientific community will eventually cost Canadians heavily.

The scientists have lobbied and spoken repeatedly without success. It is up to the citizens now to exercise their democratic rights and restrain irresponsible actions on the part of the government. We appeal to you to take whatever action is available to you such as writing to your member of parliament and other members such as the Honourable Minister of Agriculture, Mr. E. F. Whelan, and the Honourable Minister of State for Science and Technology, Mr. C. M. Drury.

The Canadian and Quebec Provincial Plowing Matches at Macdonald

by Professor Martin van Lierop
Extension Department

Macdonald College will be the site of both the Canadian National and Quebec Provincial Plowing Matches and Farm Machinery Demonstrations on September 23, 24 and 25, 1976. Plowing matches have been part of the rural scene since 1823.

Good plowing is the first step toward growing a successful crop. A good furrow incorporates crop residues and manures; it breaks up the soil for weathering, minimizes the possibility of erosion and can be a very effective mechanical way of controlling weeds in the field.

There is more to good plowing than keeping a straight furrow. A good plowman also looks for well turned

furrows that will expose the greatest surface to the atmosphere and maximize nature's work for him by ensuring that there is ample air and water circulation around the furrows. This will encourage soil bacteria to disintegrate the residues into precious humus. Good plowing will invariably contribute to soil fertility and have a direct effect on the yield of the crop.

You are invited to come and see for yourselves some of the best plowing in Canada on September 25, when all the provincial champions will compete to represent Canada in the World Plowing championships.

The Quebec Provincial Plowmen's Association will have five plowing competition classes.

1. The "Intercollegiate Class" will be held on Friday, September 24. It will bring together competitors under 21 years of age who are enrolled in various educational institutions in the province.

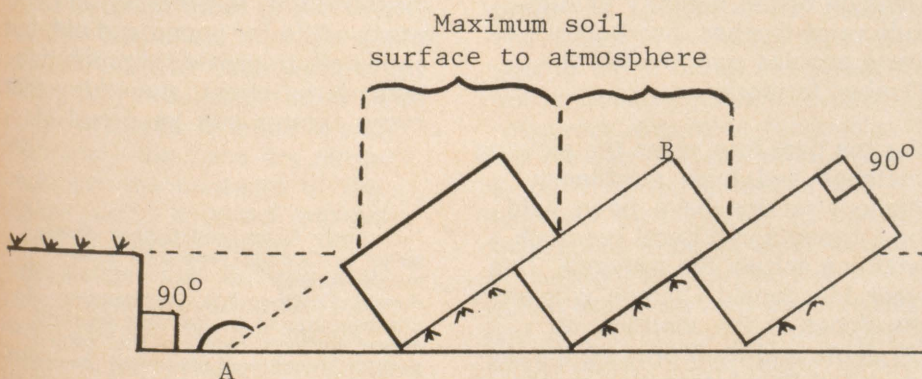
2. The "Utility Class" was established in 1973. Its main objective is to attract farmers with no previous competition experience. Competition plows are excluded from this class; plows with three or more furrows are eligible. This class will plow on September 23.

3. The "Visitors Class" will also plow on September 23. It offers two distinct options: a) Novice Option — for plowmen who have been plowing in contests less than three years; b) Advanced Option — for plowmen who have been plowing in contests for three years or more.

All plows are eligible in this class (two, three or four furrows), even competition plows. The opening split is obligatory in the "Visitors Class" but is optional in the "Utility Class".

4. The "Junior Provincial Class", open to all young people under 21 will be held on September 24. The winner of this class will become the junior provincial champion.

5. The "Senior Provincial Class" (September 24) will determine the champion and reserve plowing champion of Quebec. Together they will represent Quebec at the Canadian National Plowing Match next year. Senior and Junior championship classes are open to those who have ranked in the "Intercollegiate", "Utility" or "Visitors"



making a mattress of grass or trash underneath, and to allow air and water space to aid rotting and eventual transformation into humus.

B — Furrow comb can be edged or rounded. The rounded furrow is for an immediate seedbed.

A — Angle of turn of slice should be between 135 degrees to 140 degrees so as to present maximum soil surface to atmosphere, to avoid



Visitors to the matches also have an opportunity to watch farm machinery demonstrations.

competitions. Competitors in all classes compete for prize money and are eligible for reimbursement of travelling expenses.*

The Canadian National Plowing Match will bring together competitors from seven provinces. Each province will have two entries, their respective Provincial Champion and Reserve Champion. This annual plowing event, held each year in a different province, decides upon the Canadian Champion and runner-up, who will represent Canada in the World Plowing Match, which will be held this year in Sweden.

This year for the first time the Quebec Plowmen's Association is offering plow adjustment clinics throughout the province of Quebec. This program is directed towards farmers who are interested in learning more about good plowing and is organized jointly with the Ministry of Agriculture regional offices. If there is interest in your area, the first step would be to get a group of farmers organized — you can ask your agronomist for assistance. Then contact the Quebec Provincial Plowmen's Association, who will provide an expert to participate with you in a plow adjustment clinic. Many areas in Quebec are already taking advantage of this program, which could be an interesting project for your community. Why not talk it over with some neighbours?

The farm machinery demonstrations have become an integral part of the Quebec Plowing Competition. This new format was adopted by the Quebec Provincial Plowmen's Association to enable farmers and the public to view the latest in the farm machinery market. Equipment will be demonstrated under field conditions, which, as every agriculturalist knows, makes possible a far better assessment of its performance. There will be ample opportunity to inspect machinery and company representatives will be happy to answer all inquiries. This part of the program, coordinated by the Farm Machinery Division of the Ministry of Agriculture of Quebec, has become a very popular event with the Quebec farmers.

For the past four years the plowing matches and farm machinery demonstrations have been held on various agricultural research stations across the province. This year Macdonald College will open its doors to the visitors, as students and staff present the annual Fall Royal, featuring creative and open house displays on college research and other interesting activities. Farmers from all parts of the province have always been keenly interested in seeing the current work of the agricultural research stations; since each station has its own research program,

there is always something new to see and new ideas to bring home to the farm.

For the third year, a special ladies program has been prepared by the Home Economists of the Ministry of Agriculture of Quebec. A number of rural organizations, such as Quebec Women's Institutes, Quebec Farmers' Association, and Quebec Young Farmers will also participate.

In all, this event promises to be the largest outdoor rural activity in Quebec. The objective of the organizers is to make the plowing matches and farm machinery demonstrations interesting and worth-while for young and old, but above all, to provide through this agricultural event, something that every farmer can be proud of.

*For entry forms and further details, write to Quebec Provincial Plowmen's Association, Box 237, Macdonald College, P.Q. All farmers are encouraged to become involved, either through entering the competition, working behind the scenes, or visiting the site.

Beekeeping for profit and pleasure

(The continuation of an interview with Professor V. R. Vickery, Curator of the Lyman Museum and a Professor in the Department of Entomology. Joan Habel and Hazel Clarke asked the questions.)

Hazel: There has been a lot of popular press coverage about the killer bee. Would you like to comment?

Professor Vickery: Yes, I will make a comment about the so-called killer bees but before I discuss the Brazilian bees, you might be interested to know that they have devised hives at the University of Guelph to be used in Africa with these same African bees. These hives, which are quite different from the design we use, are going to make it easier to manipulate these bees and take off the crop. In Africa the method of gathering honey is to go out at night without any clothes on (bees crawl under your clothing and then you will get stung). Without clothes, they will crawl all over you but won't sting. People go out at night, climb the trees because most of the hives are bits of hollow logs slung high in the trees. The bees will occupy these very readily. A fire is built, the entire area is smoked and then when the bees are almost stupified, the contents of the hollow log is scooped into pails — bees, brood, honey, wax, everything. They destroy the colony but they don't destroy every colony. The big product there is not the honey; it is beeswax, which is one of their most important products, especially in Tanzania and other places close by. They ferment the honey and bees and make a kind of beer, which is pretty potent. With the new hives they will be able to extract and sell honey on a retail basis much the same as we

do here. Quite unique for them. Cities like Nairobi import a great deal of honey, which their own beekeepers will be able to supply using these new hives.

Joan: African bees are very productive, too.

Professor Vickery: They are extremely productive and this is the reason that Dr. Kerr took the 36 queens to Brazil to re-queen some of his colonies. Some of them died but several colonies were doing quite well. He built these up over a period of a year to obtain stock so that he could cross the African bees which are a different sub-species than the Italians (or ones they have in South America, which are European black bees, Italians and hybrid crosses).

The black bees, mainly from Portugal, were not good producers. Italian bees in South America produce about twice as much as the blacks. The African bees that they brought in produced twice as much as the Italians and four times the amount of the blacks. The reason for taking them in was to try to breed out some of the aggressive tendencies and excessive swarming tendencies of the African bee and then cross them with native stocks and re-queen with hybrids to see if they could improve their honey production. Dr. Kerr had double queen excluders over the entrances and, of course, none of the queens or the drones could leave the hive, only the worker bees. A neighbouring beekeeper went in on a weekend, said that was no way to treat bees and proceeded to remove all these things. By the time it was discovered they had been taken off, the colonies had swarmed and the whole thing started from there. The pure

African bees escaped and started migrating. They are excessive swarmers and will occupy areas in hollow trees that Italian bees won't look at. They build up a colony and then swarm again and again. African bees are great workers. They will work in the rain. They work almost from dawn until dark, much longer hours than Italians will, and you might think it would be great to get some in here and increase our honey production but it won't work that way. People got uptight because the aggressive bees stung people to death and killed many domestic and wild animals. Teams were sent in to study them, to find out where they were going, how fast they were travelling, and how much dilution of African blood was taking place. The upshot of it is that in Brazil, where the initial introduction was made, the aggressive traits are just about lost, they are getting higher production, and have achieved what Dr. Kerr set out to do. They did this by re-queening colonies as fast as they could with Italian stock to dilute the African blood. Meanwhile the African bees have gone about as far west and south as they can. They are still moving north. They crossed the Amazon, they crossed into French Guiana, Surinam, and they will be in Guyana and Venezuela this year. How long will it take them to reach the isthmus of Panama is a good question. Travelling at the rate of 200 miles a year it won't be very long. In six or seven years I would expect we might see some penetrate as far as the southern United States. I don't think that the systems that they have got to block them are going to be effective. I think they will penetrate to the southern United States, and the States where

they will cause the most problems will be California, Texas, Alabama, Louisiana, Florida, Georgia, and Mississippi. Those are the states that produce our package bees and in which the queens are produced, queens that we rely on here. This is another very good reason for doing a little more work on wintering our bees. We can avoid bringing in new stock. If we get contamination of the breeder stocks in these bee breeding states, our bees will tend to be a little more aggressive but that is not the big problem. The biggest problem of all for us would be the fact that the African bees will not cluster. Under very cold conditions they abscond and leave the hive and try to find some other place where they can survive, which they won't find here in winter. If there is any African blood mixed in with our bee stock we won't be able to winter them.

Hazel: Which brings me to the next question — is it difficult to overwinter bees?

Professor Vickery: It isn't easy. Our winters are cold, windy, and changeable. The authorities have recommended that if you are going to winter bees you should winter than in a building. I don't necessarily agree with them. I think we can winter bees outside, and I hope to do some further studies on this problem.

I managed to winter five colonies in 1975-76 in single brood chambers and they came through in beautiful condition. I wintered quite a number of others in doubles and all went well. There were enough that I was able to split them in the spring and doubled the number of units. I think the method I followed is a good one. I don't expect that the average beekeeper would think much about the placement of the winter cluster in the colony, but they

may think of the moisture problem because everybody will point that out to them. They don't think about the air flow pattern in the brood nest in the winter time, and this is one of the important things. You can get around the moisture problem by providing an upper entrance to the colony. Many people do this by boring a hole in the side of the super to let moisture escape and also to have an air passage from the bottom to the top. It has another use too, because quite often snow will cover the bottom entrance so the bees cannot get out at all unless they have the upper one. I don't like boring a hole in supers. In the future I am going to use a special type of inner cover where the opening will be in the bottom rim of the inner cover. It stands to reason that you can remove more moisture if your opening is at the very top.

Some people put in holes below the hand-holds, well down on the super. Well, moisture certainly will collect above that. I think that this upper entrance — right at the very top — is going to help a great deal to prevent moisture problems. You can also put something above the colony to absorb the moisture or pass it through. I used zonolite this past winter, and had no problems with moisture. I did not have an upper entrance in the five colonies in single brood chambers, but I did winter them on top of the other colonies. Battery pack with four colonies in double brood chambers on the bottom and four on the top in singles seems to work very well.

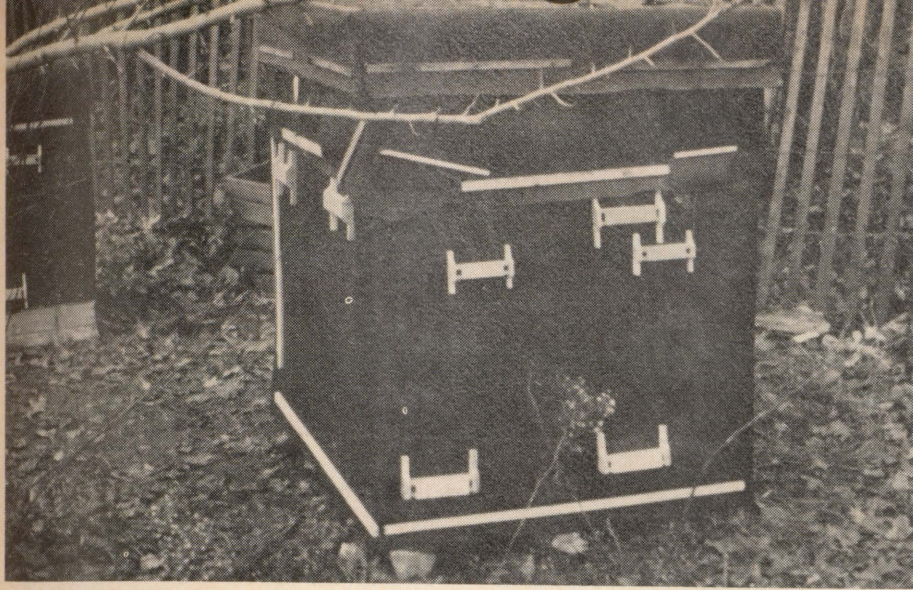
In order to winter colonies properly the first thing to think about is the condition of the colony in the fall. If the colony is not in good condition, I would not attempt to winter it at all. I would kill it or unite it with another one. Sometimes you have a very poor queen or a colony that re-queens itself very late in the

season, mid-August or later. There's no time then for that new queen to lay enough eggs to build up enough population to carry the colony through the winter. You may look at a colony in the fall and say that is a tremendous amount of bees but don't be fooled because most of these are old field bees and they are not the ones that are going to make it through the winter any way — it is the new bees which are produced late in the season that are important.

If you have good colonies, it is a matter of making sure they have plenty of stores, plenty of honey and pollen. You don't have to worry too much about the placement of the honey and pollen in the hives; the bees will move things around to suit themselves. You can, if you think the bees don't have enough honey stores, put a super of summer honey above the brood chamber, and the bees will move it down and store it in the area of the upper brood chamber where the last brood is emerging.

This past fall I had colonies in which the brood chambers were honey-bound; that is, there was so much honey there wasn't room for the queen and her brood and there wasn't enough room either for the bees to store any syrup that I fed them. I pulled the centre combs out of the upper brood chamber and replaced them with empty combs and then fed sugar syrup. The bees stored it where I wanted it, right in the middle of the brood chamber because that is where the winter cluster is. I knew the syrup wouldn't granulate. A lot of fall honey, mainly aster, does granulate and the bees can starve to death on full combs of aster honey because they can't use it. This is particularly true here in Quebec.

We don't recommend a lot of insulation on winter colonies. A light tarpaper wrap is usually all



An eight colony winter pack.

that is needed around the outside of the colony. One of the ways in which bees used to be wintered in this part of the country was in big wooden cases with sawdust or something else as insulation and it really defeated its own purpose. In effect what it did was pack the bees in an ice box and they had problems maintaining brood-nest temperature. Normally, they keep the brood nest warm all winter long. Brood rearing starts late January, early February, and they've got to be able to keep the temperature in the 90s inside the brood chamber in order to be able to do this. That takes a lot of stores and this is why the bees use so much in the winter. Most of our bees that are lost during the winter are lost through starvation not through freezing. Moisture and starvation are the two big problems. Bees can heat a brood nest area up to 34°C (92° F.) so that the queen can lay eggs even when the colony is subjected to minus 50°F or C. If they have the supplies, they can look after their own heating problems. I can bring colonies through here in Quebec with 30 pounds of stores in single brood chambers using the battery pack method. Sometimes you find that bee hives in the winter are nearly buried in snow banks. The two batteries out here last winter just about disappeared several times, but when I went to dig them out I found that there was enough heat loss to melt the snow close to the battery creating an air space of six to eight inches all around. Bees were coming out and making cleansing flights in this space around the hive.

Joan: And the snow probably acted as an insulator, too.

Professor Vickery: Yes. If you are wintering bees with only a bottom entrance, I would say you had better dig them out because the bottom entrance is going to get plugged with snow and ice, but as long as the other one is open there is no problem.

Joan: Would it disturb the bees if you built a wind break?

Professor Vickery: Any kind of wind break helps. If there is nothing growing there, use some snow fencing to cut the wind.

Hazel: Since we published Part 1, we have been asked if you would comment on the effect of pesticides on bees?

Professor Vickery: Most pesticides are toxic to some extent to honey bees although a few of them are quite harmless.

They are usually listed in three categories (1) non-toxic to slightly toxic, (2) moderately toxic, and (3) highly toxic. The following list includes some of the common pesticides (insecticides, fungicides and herbicides) and their effects upon honey bees.

Non-toxic to slightly toxic — (Insecticides). Pyrethrum, Rotenone, Derris, Methoxychlor, Kelthane, Malathion, Ethion, Tedion, Dylox (dipterox), Systox (demeton), and several others. **(Fungicides)** Captan, Ferbam, Maneb, Phygon.

(Herbicides) Both 2, 4-D and 2, 4,

5-T are listed as only slightly toxic to honey bees. However, they do kill bees which are on vegetation at the time the spray is applied. When the plants dry, there is little harmful effect but of course these herbicides do destroy "bee pasture".

Moderately toxic (Insecticides): Endrin; Thiodan; Trithion; Dime-thoate.

Highly toxic (Insecticides): All chlorinated hydrocarbons not previously mentioned, especially Chordane and Lindane; compounds containing arsenic; Chlorothion, Diazinon, Di-syston, Guthion, Parathion, Methyl Parathion and Sevin (carbaryl). Sevin is one of the most commonly used insecticides and it is extremely toxic to honey bees. One potential problem is use of Sevin on corn, since honey bees may gather large quantities of pollen from corn tassels if there are cornfields near the bee hives.

Quebec laws prohibit spraying of fruit trees during bloom with insecticides hazardous to bees. However, most of the damage to bees occurs before and after fruit bloom, since ground cover plants such as dandelions become contaminated.

The modern, highly toxic pesticides usually kill bees before they can return to the hives. Loss of bee population is the main result and may not be detected very readily. Some chemicals, notably the arsenic compounds, do not kill field bees quickly, but are carried to the hives on contaminated pollen which is then stored. The poisoned pollen kills the brood to which it is fed as well as adult bees which consume pollen in order to produce Royal Jelly for brood food. Colonies so affected dwindle and may be completely lost.

A New Role for Women in Rural Communities

by **Gordon A. MacEachern***

*President, Agricultural Economics Research Council of Canada, Ottawa, and Chairman, Department of Agricultural Economics, Macdonald College. An edited address to the Annual Convention of the Quebec Women's Institutes at Macdonald College on May 27, 1976.

In a few days, representatives from more than 150 nations around the world will assemble in Vancouver for one of the largest United Nations' Conferences ever held. They will be discussing for the first time the perplexing problems of inadequate human settlements, especially the worsening situation in rural areas and the need to seriously address these and the related problems of population, food, and environment. Habitat is just one of many world Conferences held recently on worsening conditions or crisis threatening the survival of man. These concerns of the world's leaders, when taken together, have one singular message — a tremendous need exists world-wide for agriculture and rural development to improve human diets, health, and the overall quality of life on this planet both now and for the future. There is also a growing realization that these are complex interconnected problems and cannot be solved by focusing just on one thing. They can be successfully addressed by dealing with the various pieces in an integrated fashion within the overall rural development task. The role of women is critical in this effort and a greater role for women must be facilitated.

These concerns and tasks may not be new to the Quebec Women's Institutes but similar in many ways to its aims and objectives

for over 60 years. Yet this new awareness of the intensifying problems and the benefits of developing rural communities can provide a new impetus to strengthening efforts, and the Quebec Women's Institutes assuming a leadership role in improving rural living.

Why the need?

The skeptic will ask — But have things really changed? Rural and farm people are still behind the eight-ball in getting the kind of attention and help they deserve. Have these big Conferences ever solved any real problems? Is it not much talk and little or no action? There is much to be skeptical about in today's world and all can agree that these are confusing and uncertain times. Conferences of the sort being called on pressing concerns help all of us better understand the problem and, by creating a public awareness, create a more favourable environment for change and improvement. But if success is to be achieved, action must be taken by those best in a position to bring about improvements in the home and country which ultimately comes down to you as an individual and working co-operatively with neighbours.

There is ample evidence to suggest that living conditions for many rural people have deteriorated and that future prospects offer no easy solution. We have grown accustomed to an urbanization-industrialization pattern, a lifestyle supported by the idea that a relative abundance of good land, cheap energy, clean air, machine technology could support these

trends, as well as a rising living pattern well into the future. A variety of basic forces have been trying to say for some time that too much pressure is being exerted on our fragile resource base. Some of our so-called advances have had an unfavourable impact on the living environment. The most significant change is a general realization that much of our so-called progress is not progress at all, and fundamental shifts are needed and are taking place in society's priorities. This conclusion results from analysis of what's behind the many "crises" that have plagued us of late in energy, world food production, environment quality, urban difficulties and inflation in this inter-dependent world in which we live. Each day a new crisis seems to emerge, but these are not separate events but a chain of events. Yet a lot of things seem the same in rural Canada because of confusing paradoxical situations. For example, despite the great deal of attention given to world food scarcity, hunger and even malnutrition, we are in a so-called beef and dairy surplus situation and in the midst of cutting back production, severely affecting the livelihood of many livestock farmers. Farmers feel threatened by rising input costs despite the general improvement in food prices in recent years and are worried about price and income stability.

The severe shocks producing the most severe economic impact since the Great Depression in the Western world have produced varying effects, including pointing out some real weakness in current farm and food policy. We are

experiencing chain-reactions then to a number of events resulting from trends and fundamental forces operating to alter these trends. Faced with these basic changes, this country's and the world's people will be tested to their very limits in producing and distributing the food required during the remainder of this century. This is not to say that climatic variability that produces occasional surpluses will be a thing of the past. Even though variations in climate will produce periodic surpluses, the resources needed for this task of producing food are awesome. But just as critical will be the revitalization and rebuilding of rural settlements to maintain and attract the human resources needed to produce food and to directly improve the living standards of an expanding population.

Where is the Evidence?

All may not agree with this view of the future and what it means to rural people. What is even more important than agreeing or not agreeing is that we be sufficiently concerned about the future to make our own assessment in time to plan accordingly. To me, the best evidence available today on the nature of the world food problem and its implications is provided by the second report of the Club of Rome, *Mankind at the Turning Point*. With 70 million people now added annually to the world's population, we will see a doubling of world population in just 30 years. This means food production must increase at rapid rates under new constraints on energy supplies and prices, fertilizer, transportation, irrigation,

water and land shortages, and a new emphasis on maintaining or improving environmental quality. Climatologists disagree on some things, but agree that we are entering a period where climatic variations are more unpredictable and probably less favourable than during the past 100 years. The future challenge in providing more food comes on top of the rather dismal state of world food supplies and living standards that exist today.

It is within such a context that we must view our own situation in this country and in this province, not from the standpoint of facing doom and gloom, but a very serious challenge to produce our own food needs and to contribute to easing the world food problem. For example, while Canada and Quebec are blessed with much agricultural land relative to most other countries, we see food output in Canada overall declining by 20 per cent over the last five years. The volume of imported foods has increased quite sharply and our food exports, mostly grain, are stable. Our crop production generally has been poor including production of forage, fruit, and vegetables. There is some evidence that we are facing some real shortage problems, e.g., a severe animal protein situation resulting from palm oil discouraging the production of soybeans, rapeseed, and other animal protein meal. Despite some so-called surpluses in food products, e.g., milk, we import a great many dairy products and in a number of foods have the highest prices now in the world. Nutrition surveys of Canadians point out some very serious problems as well. Estimates have been prepared to show

that inadequate nutrition costs this country over three billion dollars per year in health costs and work loss, not counting the immeasurable costs resulting from mental and physical deformities that condemn these people to deprivation, poverty, and to being perpetual welfare recipients.

What is needed?

It has become popular practice to take a one-sided economic approach to farm and food problems. Some feel that rural home life depends primarily on overcoming the farm income problem and improved farm policy. A closer look will reveal that income levels result from not just prices but what is left over after farm family purchases. There are many instances where expenses are high because the level of purchases are very high and/or due to a lack of local services and supplies, prices are high. Similarly, on close inspection, one finds that money is not the prime consideration of families, rather it is the ability to obtain that bundle of amenities which insure a meaningful quality of living to the individual. This means that efforts to achieve rural development must be undertaken with full recognition of how the various problem parts are inter-connected and relate to the whole.

The term is "integrated community development". For example, take the current day problem where a number of dairy farmers in Quebec are unable to sell their milk and feel a change in dairy policy is required. Many of these dairy families purchase feed and like the rest of the community

now buy much of their food including butter, cheese, veal, and vegetables, with some of these provided by imports. More home-grown and prepared food and produce exchange facilities within the community might make as much improvement or more than a change in quota policy. The point is that while improvements and changes in farming and farm policy are required, equally if not more important in improving the quality of living for rural people is all the other related improvements that are possible, providing the bundle of amenities which contribute to better family living. Clearly, no two rural areas are alike in resources or needs. There are a great many differences in the amenities available to rural communities, their organizational capacity and what people want for their community. But overall, there is a general lack of adequate community facilities and services in such areas as transportation, financing, housing, recreation, medical, educational, and health care. An obvious need exists for planning developments at the community level so as to control undesirable developments and preserve the natural beauty, cultural significance and food productivity of the area.

How?

There are many alternative ways and strategies in initiating successful integrated community development programs. An obvious first step is that people in the community must communicate and develop a common vision of what is needed and desired. In any community there are usually a number of organizations already existing to carry out certain roles

and responsibilities and all are important to a co-operative development effort. One can begin the development process by setting objectives by asking such questions as: Is the quality of community life optimal or merely acceptable? Is it adaptable to present or future needs, or is it static? What can be done to raise the level and quality of services needed by the community, including the young and senior citizens? How many people can the local rural resources support?

There are undoubtedly a variety of constraints existing that must be dealt with or overcome if objectives are to be achieved. For example, a good many government programs and regulations that constitute significant forces toward encouraging urbanization and rural deterioration. There is an important watchdog role on public policy that may have unfavourable impacts on the community. With the help of resource people and organizational expertise, a rural area may get in the position of suggesting policy alternatives and recommendations on rural development to government.

There is an important community action program need to directly improve facets of rural life in an orderly and timely sequence. Program planning is a process of deciding on a number of logical steps from alternatives and means to best achieve the desired output.

The Role of Education and Research:

A serious rural development effort requires information and educational inputs throughout.

We need knowledge, ideas, and enterprise, more than people ever before needed them. Why? Because we are living in a period of the most profound social and economic change. There is a need to continually question what we are about, alternative ways and means, new technology that can be applied. Education and continuous learning is the key to facing difficult challenges courageously, because it helps us ask important questions and consider various alternatives in finding answers. None is too old to acquire knowledge. At 45 we are still able to learn more than we could at age 14. At 65 we can still absorb knowledge as fast as when we were 25.

Rural people have always operated at some disadvantage in having access to educational services. But hand in hand with education and learning is the constant need for research and knowledge development to better understand community problems, potentials, and alternative ways of dealing with them. It is in the field of education, research, and knowledge development that we at Macdonald College can and are dedicated to assisting you in your efforts at building better rural communities and improving farm family life in this Province. We believe substantial progress is needed and that progress can be achieved because of an old truism:

Whatever you vividly imagine, ardently desire, sincerely believe in and enthusiastically act upon — must inevitably come to pass.

The Family

Farm

Published in the interests
of the farmers of the province
by the Quebec Department of
Agriculture.

QUEBEC AGRICULTURAL MARKETING BOARD: RESULTS AND PROSPECTS

by Benoît Lavigne,
Chairman,
Quebec Agricultural Marketing
Board

1. History of the Board

In 1951 the Legislature created a committee to study problems related to the production, sale, and distribution of farm products and to the protection of farmers' and consumers' interests. It came to be named after its chairman, the Honourable Mr. Justice Héon.

In its final report submitted in 1955, the Committee recommended the adoption of legislation providing for and facilitating the setting up of a mechanism supplementary to cooperation, enabling producers to take an active part in marketing their products, namely through joint plans. It also suggested the creation of a governmental body, under direct jurisdiction of the Lieutenant-Governor in Council, to authorize the new marketing formulas, help coordinate the various operations entailed in the profitable marketing of farm products, and protect the legitimate interests of the parties interested in that marketing — producers, merchants, and consumers.

The Legislature has taken into consideration most of the sugges-

tions of the Héon Committee and, early in 1956, the Lieutenant-Governor in Council assented to the act setting up joint plans. A joint plan can be likened to a charter, issued by the Marketing Board, creating a producers' board and indicating to it its powers and duties and, particularly, allowing it recourse to constraining mechanisms on all concerned: grading system, prices, means of transportation, etc.

In 1963 the Legislature reduced from 75 per cent to 66 2/3 per cent, the proportion of votes in favour needed for a joint plan to be authorized, on condition that at least 50 per cent of the producers concerned had voted. Moreover, since the act was revised in 1974, the Lieutenant-Governor may, if he deems it expedient, exempt the Board from submitting a plan to such a referendum.

In 1963, at the time of a revision of the act, the present Quebec Agricultural Marketing Board was set up, taking over the Quebec Dairy Commission and being entrusted with the task formerly carried out by the inspector general of dairy products.

2. Results

Joint marketing plans at present in force cover fluid milk, industrial milk, pulpwood and timber

wood, poultry, consumer eggs, canning tomatoes, blueberries, and part of the maple syrup and maple sugar production.

After having seen the implementation of several joint plans in the sixties regulating milk shipments to regional markets or designated factories (Carnation, Lowrey's, J. J. Joubert, Fry-Cadbury), we can now perceive, since the early seventies, an effort to consolidate plans on a provincial basis. For example, on December 31, 1959, there were 16 joint plans governing fluid milk production. Since 1970, the Quebec Milk Producers' Federation has administered a marketing plan covering the entire fluid milk production of the Province of Quebec.

In other sectors, however, plans of decidedly regional scope and jurisdiction still prevail, although one must admit that a certain degree of administrative consolidation is now apparent. Thus, in the pulpwood and timber wood sectors, several producers' syndicates administer more than one joint plan. For example, the Quebec Area Wood Producers' Syndicate administers joint plans for Lévis-Bellechasse, Lotbinière, Mégantic, Portneuf, Montmorency, Charlevoix and the North Shore.

Under the act, agricultural producers may resort to three types of joint plans. The first type is limited to promoting the consumption or utilization of a specific product or sharing publicity costs

among producers. A second type serves as a framework for negotiating prices and other buying and selling conditions between producers and buyers, and a third allows for the creation of a central agency for the sale of the product concerned; such agencies now govern the marketing of fluid milk, eggs, and wood in certain areas. All parties concerned are keeping an interested watch on the development of this type of plan. However, it has not yet managed to cope with all of the many problems along the way, such as faulty discipline, very centralized administration, etc.

As regards certain agricultural products, producers have quite recently tended to group themselves on a national scale under the act providing for the creation of national marketing agencies. In such cases, the national Board and the provincial marketing boards take an active part in the discussions and framing of agreements and administrative policies concerning their operation. Quebec has thus actively participated in the creation of national boards for the marketing of milk, turkeys and consumer eggs, and a national chicken marketing board is at present under study.

Besides providing producers with a collective marketing structure, the establishment of joint plans and the setting up of a controlling and supervisory body have induced the various parties involved in marketing agricultural products

(producers, transporters, wholesalers, and consumers) to meet and discuss problems common to their respective spheres of activity.

Mechanisms facilitating information, communication, negotiation, and anticipation of problems have been set up. We may briefly mention the following: accredited associations of buyers and of carriers, bipartite or tripartite expert advisory committees, and the creation of a marketing service by the Quebec Department of Agriculture.

In the long run, buyers and producers are learning to take into account in their periodical negotiations the well-being of the national economy, outside competition, and publicity needs. They nearly always manage to channel their energy toward common goals: income stabilization, continuance of market sharing, etc.

3. Prospects

At the provincial level different groups of interested producers have already submitted to the Board, generally through a specialized Federation, petitions for approval of joint plans to regulate most of the agricultural productions not yet covered: pork, beef, potatoes, canned vegetables, commercial and industrial crops, urine of pregnant mares, apples, consumer eggs, maple sugar and maple syrup. These petitions are now being considered by com-

mittees of experts in each sector. In a few months these committees will give their estimate of the possibilities of each of these plans, and it will then be up to the producer to make his opinion felt before the Board decides their fate.

At the national level, there will probably soon be a Canadian marketing board for broilers and, later, one for hogs and one for potatoes.

The experience acquired by joint plan administrators, the ground-work done by the plan committees, and the drawing up of regulations more adequate than in the past will enable the Province of Quebec to concentrate its efforts to improve productivity at all levels, from and including the farm production to the consumer's table.

THE CROP DISEASE WARNING SYSTEM — MORE EFFICIENT PROTECTION FOR CROPS

by Gilles Emond,
Director,
Crop Protection Division, and
Henri Bégin,
Agronome,
Research and Education Branch,
Quebec Department of Agriculture

The results of specialized research by scientists in the Quebec Department of Agriculture now permit more efficient methods of crop protection. Thanks to the establishment of a plant disease and pest warning network covering various sectors of crop production, farmers can be given timely warning of the development and progress of crop pests and information on the best methods of coping with them.

The warning system, as opposed to crop protection guides, provides detailed information on regional climatic conditions and localized distribution and development of different pest species. Its aim is to organize crop protection involving orderly application of control and reconciling crop health demands with those of ecology and toxicology.

The present warning system which has provided and is still providing valuable services, must be intensified and reorganized in relation to proposed new facilities. Its efficiency could be greatly increased by the addition of crop disease and pest warning stations.

The role and advantages of the network

The network has to transmit, at the proper time, accurate and appropriate instructions called "warnings", "Notices of Alert", "Information and General Information". They are prepared by researchers in keeping with the concept of integrated prevention and are written and sent out to farmers and agronomes. The warnings result in considerable technical advantages and financial savings. The treatments being more timely and applied in a more rational way, less pesticide is needed, useful and predatory insects are spared and undesirable pesticide residues diminished.

Scientific basis of warnings

Those who supply information day by day to the person in charge of a warning station must have, amongst others, the following qualifications: a thorough knowledge of the biology and life cycle of crop pests, the growth stages of the host plants, the effects and effectiveness of pesticides, and the influence of climatic conditions on the growth of crop plants and on the development and spread of their enemies. Current research is oriented in relation to network needs. As chemical control is designed to wipe out the various crop pests, it follows that

information furnished by the station must, as much as possible, be based on the concept of integrated control.

Organization of the network

A warning station comprises a central station with main and sub-posts.

a) Central stations

The role of central stations is at present carried out by the Crop Protection Research Centres at Farnham, L'Assomption, Saint-Hyacinthe, and the Complexe Scientifique at Quebec. In plots adjoining these centres, observations are made on the growth and development of plants and their enemies as an indication of crops and pests in the region which may be the object of warnings. These central stations disseminate regional recommendations based on observations collected by the main and sub-posts.

b) Main posts

These record phenomena within the area covered by a central station so that it can make regional recommendations. They collect data and observations over a fairly large territory and thus supervise the sub-posts.

c) Sub-posts

These record local differences of temperature, humidity, and precipitation within the natural climatic zone covered by a main post. Responsibility for these sub-posts is assumed by conscientious and interested farmers who supply the central station with which they are connected with information on the local progress of crops and their enemies.

Cooperation among the bodies concerned

The Research and Education Branch of the Quebec Department of Agriculture and its Crop Protection Division, which operate the network, rely on the close cooperation of bodies directly interested in crop protection, namely: the Regional offices and Laboratories Branch, the Plant Productions Division of the Quebec Department of Agriculture, federal and provincial agricultural research stations and the stations of the Faculty of Agriculture and Food of Laval University.

How the network operates

The central station and the main and sub-posts gather the meteorological data with the help of the basic meteorological service of the Quebec Department of Natural Resources. This network is backed by auxiliary stations meeting the needs of the sub-

posts. Post heads transmit each day's data by mail, Telex, or telephone to the person in charge of the Central Station who thus always has an accurate idea of the climatic, biological, and growth situation in his area. In addition, crop protection specialists meet during the season, form a picture of the development and spread of pests, and warn the persons in charge of central stations. Decisions can then be made concerning the kind and timing of measures to be taken and to transmit the appropriate warnings to farmers in the region. As regards the dissemination media, namely Telex, radio, television, telephone, press, circular letters, they are chosen with a view to rapid, cheap, and efficient communication.

Conclusion

The Quebec crop protection warning system has many objectives in view:

- 1) To warn producers by sure, rapid, and timely contact of the most efficient, least objectional and cheapest means of protecting their crops.
- 2) To direct crop protection research more efficiently in the light of information obtained from the network.
- 3) To reduce risks of pollution by the rational use of pesticides.
- 4) Improve the quality and increase the yield of crops and reduce the cost of producing them.

QWI

Foster Parents

In May 1961 the members of the **Black Cape WI** (Bonaventure County) became Foster Parents to a little girl in the Philippines. Letters were exchanged and money sent regularly to help with food, clothes, and education for this little girl. Birthdays and Christmas were remembered with money and gifts. In 1970 this girl became 18 and was no longer eligible for benefits from the Foster Parents Plan. The Branch sent her a sum of money at this time, which enabled her and her mother to set up a dressmaking shop.

In March 1973 the Branch adopted a five-year old girl from Bolivia. Money is sent every month to help the family which consists of a widowed mother, two brothers of six and seven years.

Being foster parents is not the only undertaking of the Black Cape Women's Institute. Throughout the years they have sponsored many projects. At the present time a Bursary of \$200 per year is available to students in the English section of the Bonaventure Polyvalente School.

Most of the money for these worthwhile projects is earned by the Black Cape WI through catering for suppers and banquets.

The Valcartier District (Quebec County)

We live in a valley surrounded by mountains — the Valley of the Jacques Cartier River. In autumn the colours of these hills are glorious, and the district is an artist's paradise. When travelling through the hills and mountains at that time of year it is not

unusual to see one of these painters hard at work.

For many years we were one of the few English settlements in the province. However, that situation has changed and now many French families are building cottages along the river banks. Others have opened up stores, restaurants and garages. Of course the latter group are pretty well bilingual.

The original people were farmers. They did mixed farming on a small scale. Many of their descendants are farmers, too, but they are farming in a very different way. They specialize in turkey production. They raise broiler and heavy turkeys. This requires modern buildings, which must be well equipped, and also a lot of efficient workers. Each farmer has a quota and must follow government guidelines. They start the poults early in the year and try to have all their birds marketed by the fall. Then begins the big clean up so as to be ready for early operations again.

The poults are produced locally. One of the hatcheries is a branch of the Cuddy Farms in Ontario, and the other is independently owned. These hatcheries give work to quite a number of people.

Some of the people go into Quebec City or Valcartier Camp to work in paper mills, offices, etc. There are many truckers, too.

We have an Elementary School with grades one to five inclusive. Loretteville is the nearest town. It is about eight miles from Valcartier, and we are approximately 15 to 20 miles north of Quebec City. The roads are quite good and in a very short time one can cover many miles.

In summer it is a very nice place to live, but our winters are long and cold with a great amount of snow. Consequently, in summing up I'd prefer Florida in winter.

The Thousand Island Trip

Last August members and friends of the **Jerusalem-Bethany Women's Institute** (Argenteuil County) boarded a bus heading for Gananoque and the Thousand Islands.

We arrived in Gananoque about noon, had our lunch and then the 40 of us boarded one of the Gananoque boats which was filled to capacity. The visibility being perfect, the islands showed up to advantage. There are roughly 1,064 islands, some large, some small. It was interesting to hear the guide explain various historical incidents relating to many of the islands as our boat sailed by. Among the sights, we saw the "Shortest International Bridge in the World". It is only 30 feet long and connects an island in Canada to another situated in the United States. The "Gondola of the Skydeck" rises 400 feet above the St. Lawrence River; from here a view of over 40 miles can be seen. Palatial summer homes have been built on several of the islands. A castle, built on "Heart Island" now lies in ruin. Our boat passed under the well known and much travelled Thousand Islands Bridge — cars and trucks on the bridge looked like toys from the boat!

There are one-hour or three-hour trips on these tours. We were pleased to have chosen the longer of the two, as all of us thoroughly enjoyed the relaxing and beautiful time spent on this Thousand Island trip.

(The following is a bit of a switch for WI pages — it is written by a recipient of a WI branch's hospitality.)

Kinnear's Mills Entertains

On the morning of June 8 some 40 members of the Golden Age Club of Lennoxville climbed into a bus driven by Mr. Lowell, a very competent host and driver. The weatherman sent a delightful day, so the day was enjoyed to the full.

We passed through East Angus, Weedon Centre, St. Girard, Garthby, Disraeli, Vimy Ridge and Black Lake where, during a brief stop, we were able to see the wonderful engineering feat of creating this deep "mine hole" from the bed of a large lake — Black Lake. Then on to Thetford Mines, with its depressing high hills of asbestos slag. Some of the buildings have had to be relocated two or more times and some face a third shift.

Mrs. Charles Little, as guide, aided by the Group President, Mrs. Donald McElrae, gave interesting and informative information of the areas passed through as the bus rolled along.

After Thetford Mines, we saw Robertsonville and Pontbrian, then were delighted to enter Kinnear's Mills, in anticipation of homemade chicken pie and all the trimmings. At 12:30 we sat down to dine at two long tables in the Community Centre, which was the Intermediate School until larger schools closed it. Members of the Kinnear's Mills WI certainly deserve credit for their hospitality and their good "eats".

The Mill and the surrounding countryside are all steeped in history. Well worth reading are the many articles and books written about them.

Back aboard the bus we saw Leeds Village, the beautiful Lysander Falls, Arthabaska, Danville, Windsor, Bromptonville, Sher-

brooke, and back to Lennoxville. More trips through the same area would be "grand!"

ACWW UNESCO Gift Coupon Project No. 569

This project is to aid in providing Leadership Training and Nutrition Education in: the Gilbert and Ellice Islands in the South Pacific, Malaysia (Sarawak) in Asia, and Zambia in Africa.

You may choose whichever country you wish to help. The equivalent of \$5 (U.S. funds) will provide literary materials, visual aids, booklets, garden tools and seeds; \$15 to \$25 (U.S.) will provide costs and materials for demonstrations; \$25 to \$50 (U.S.) will provide nutrition education kits, and \$100 to \$250 a leadership training course, typewriters, piped water supply and sewing machines.

The total amount of any contribution goes to the project of your choice — all costs are borne by UNESCO.

Donations go to the Provincial Treasurer and are marked "UNESCO Gift Coupon No. 569". The Nutrition/Education Fund, which also provides leadership training (in India, Columbia and Brazil), is an ACWW project. Both are very worthy causes and deserve our support.

Abbie Pritchard Fund

Abbie Pritchard was a member of QWI. When she died her will stated that a Fund was to be set up to build a home for retired WI members. Unfortunately, the money she left was not sufficient to start and build such a home and no other monies have been added to it. A few years ago the QWI decided to use the interest from the capital to buy mohair throws to present to WI members who are either bed-ridden or invalids. These throws were decided upon because they are very light and warm and are a comfort to someone either in bed

or not able to move about very much. It was felt that this was something Abbie Pritchard would have approved of. If any branch has a member they would like to honour in this way, apply at the Office for a form which has to be filled in, signed by the County President and Secretary and returned to the Office. As only a limited number of throws are available each year, they are sent out at the discretion of the Executive.

Pennies for Friendship

The idea for Pennies for Friendship originated with Mrs. Godfrey Drage of the Associated Country Women of the World. They are voluntary gifts to ACWW and are used to run the Associated Country Women of the World office in London, Eng.; to finance the Triennial conferences; to link Institutes and groups in many countries; publish the ACWW magazine, "the Countrywoman"; find pen pals for members, and arrange exchange programs, etc. When a country wants information on starting a society which they hope can be associated with ACWW, someone has to go to that country and explain the work and help them organize their branches. ACWW cuts corners (expensewise) wherever they can, and the official nearest to the asking country goes. Sometimes an official will combine several functions to save pennies.

The pennies are collected in many ways; sometimes a special meeting is set aside for a "Pennies" collection. Some branches have a box available at every meeting. Some have a special function such as a tea, play, entertainment, or book sale to raise pennies.

As the smallest form of currency, the penny was chosen so that all members, no matter what their means, could feel they were contributing to the organization which does so much for them. The better off countries can and

Top: Mrs. R. Knowles, left, visits with WI friends at Convention, including Miss Norma Holmes, former Provincial Secretary and a member of Stanstead North WI. Centre: Mrs. W. Kilgour, who was elected 2nd Vice-President, presented a retirement gift on behalf of the Counties to Mrs. A. Champion. Below: Mrs. Wells Coates chats with Mrs. E. Sweetman of the Port Daniel WI.



should contribute more in order to keep up with the work of ACWW which expands every year.

Nutrition Education Trust Fund

This fund grew out of the Save Sight Fund begun in the 1971-74 triennium. The aim is to train the family in good nutrition habits using the food available locally or showing how food can be grown that will provide good nutrition.

Doctors have found that expectant mothers, who don't get the right diet and especially not enough or no Vitamin A, can produce children that are blind or with damaged sight. Inadequate diet for children causes all kinds of diseases and even brain damage. So the fund is used to set up village training centres. Short training courses are given to village leaders and they in turn teach their people.



There are training centres in Madurai in South India and in Mirpur. The Associated Country Women of the World (ACWW) will support a new project for two years, paying half the cost in Western India. The Indian Government is gradually taking over a greater share of the operation of the projects and they will eventually become part of the State Health Scheme. ACWW helps to start it and then moves on, the best way.

ACWW works in conjunction with the governments concerned and UNICEF provides equipment.

The Fund helps support work in Lesotho, South Africa. A course entitled Nutrition and Happy Family Life was given to 40 women in this country last year.

Another project is in Brazil, near Recife. This is a two-year project, where as well as training, the family receives a supplementary food supply and mothers receive prenatal care.





Three members of the Rawdon WI who recently received their 25-year pins are from left to right: Mrs. V. Rourke, Mrs. J. Asbil, and Mrs. A. Hubbard.

Dear WI Members,

There has been a wealth of material sent in to our editor, so this must be brief. Summer has reached its peak, haying and summer holidays are the order of the day. Also, some attention has been directed toward the Olympics. Any one who has travelled around the area, feels the excitement and pride that surrounds it. Montreal certainly is a colourful city! Some counties, too, report fewer meetings in July and August.

Interesting addresses have been given at **Aylmer** (Gatineau Co.) Mrs. Diane Aldred spoke on Heritage Homes in the area and showed slides.

Stanbridge East wrote that a comprehensive report had been given on FWIC by Mrs. Murray Mason. Miss Hanna Smith reported on the same topic at **Upper Lachute** branch meeting. At **Lakefield** Mrs. J. Smith spoke on P.E.I. At **Dunham**, for the benefit of the new members, the history of the Cairn was given.

Mrs. George McGibbon, guest speaker at **Upper Lachute**, gave an interesting presentation on the WI organization. She asked all members to remember the Collect and said that branch funds could be used to educate members in the various fields.

Auction sales were held at **Quyon** (Pontiac Co.) and at **Dalesville-Louisa** (Argenteuil Co.) Some branches have catered for wedding

receptions and anniversaries. Another note from Argenteuil County. The **Frontier** branch reported a highlight of one of their meetings was when the President demonstrated how to put on a tight girdle. All branches in **Missisquoi** County reported new members. **Pioneer** branch made plans to attend a festival in Smiths Falls in July. We hope to hear more about this.

Donations to community projects were varied and generous. **Melbourne Ridge** supported the Junior Farmers to print a new fair book. **York Branch** (Gaspé Co.) gave prizes to the Elementary School, as well as three small cups for the special classes. **Marcil** branch (Bonaventure Co.) awarded trophies and prizes to the three schools in the area. The same may be said for **Kinnear's Mills** and **Inverness** (Megantic Co.) and for **Dalesville-Louisa** and **Upper Lachute East End** branches.

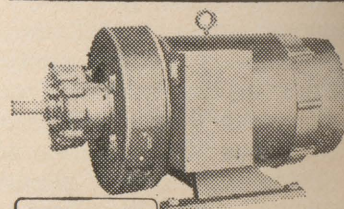
Dunham decided they could sponsor a second child at the Dixville Home. **Howick** reported sending a scrap book relating to the industries of that area, to P.E.I. The same Branch enjoyed a picnic and sight-seeing tour of the Beauharnois locks of the St. Lawrence Seaway.

Dundee Branch had a discussion on the problems faced by dairy farmers and on Quebec Hydro's plan to build a power line through a rich farming section rather than using an alternate route.

Some interesting mottoes were submitted: Listening to both sides of a story will convince you that there is more to a story than both sides; Many of the shadows of life are caused by standing in our own sunshine; The only two who can live as cheaply as one are the flea and the dog, (from **Melbourne**); Educate a woman and you educate a family.

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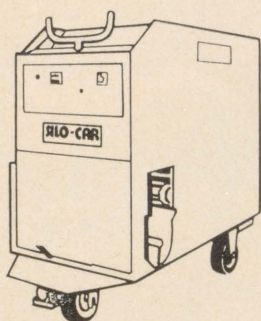
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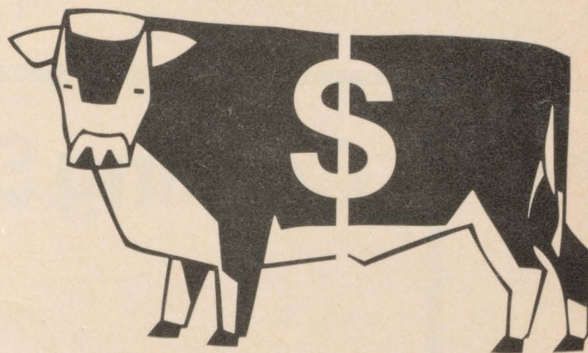
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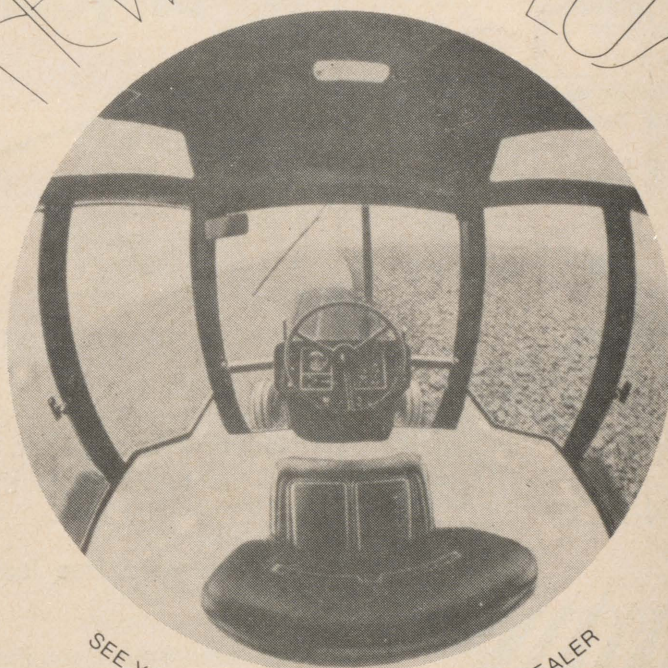
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